

**I claim as follows:**

1. A directional aerator, comprising:
  - a float
  - an uptake pipe extending through said float;
  - 5 a means for pulling a flow of wastewater into said uptake pipe and vertically displacing the wastewater upwardly through said uptake pipe; and
  - at least one pair of baffles for deflecting the flow of wastewater upon discharge.
- 10 2. The aerator of claim 1, wherein said float comprises a first major surface, a second major surface, and a side surface.
3. The aerator of claim 2, wherein said first major surface is above a surface of the wastewater.
- 15 4. The aerator of claim 3, wherein said float is cylindrical.
5. The aerator of claim 3, wherein said float is formed from one of stainless steel and reinforced fiberglass.
- 20 6. The aerator of claim 3, wherein said at least one pair of baffles are proximate a discharge outlet on said first major surface.

7. The aerator of claim 6, wherein each one of said pair of baffles includes a curved edge.
8. The aerator of claim 2, wherein said means for pulling the flow of wastewater is an impellor operably associated with a motor.
9. The aerator of claim 8, wherein said motor is a sealed electric motor.
10. The aerator of claim 8, wherein said impellor extends into said uptake pipe.
11. The aerator of claim 8, further comprising a motor base plate secured to a lower end of said motor.
12. The aerator of claim 11, further comprising an extended directional base plate secured to and intermediate said motor base plate and said baffles.
13. The aerator of claim 12, wherein said extended directional base plate includes a curved inner edge aligned with a discharge outlet of said uptake pipe.
14. The aerator of claim 13, wherein said extended directional base plate includes an outer edge aligned with said baffles.

15. The aerator of claim 14, wherein said outer edge includes a first portion and a second portion.
16. The aerator of claim 15, wherein said first and second portions are curved.
- 5 17. The aerator of claim 13, further comprising at least one pair of mounting ribs secured to said first major surface and intermediate said pair of baffles and said discharge outlet.
- 10 18. The aerator of claim 17, wherein said curved inner edge overlaps said mounting ribs.
19. The aerator of claim 2, wherein said uptake pipe comprises a first portion and a second portion, said first portion extending substantially perpendicular to said second major surface.
- 15 20. The aerator of claim 19, wherein said second portion extends substantially parallel to said second major surface.
- 20 21. The aerator of claim 20, further comprising a curved elbow integral with and connecting said first and second portions.

22. The aerator of claim 2, further comprises an extended mounting rib secured to said first major surface, said extended mounting rib extending from a discharge outlet to said side surface.
- 5      23. The aerator of claim 22, further comprising an electrical cord-mounting bracket.
24. The aerator of claim 23, wherein said electrical cord mounting bracket is secured to an end of said extended mounting rib proximate said sidewalls.
- 10      25. The aerator of claim 1, further comprising a controller for controlling the volume of wastewater flow being discharged.
26. The aerator of claim 25, wherein said controller is remote from the aerator.
- 15      27. The aerator of claim 25, wherein said controller includes a variable frequency drive in communication with oxygen meters for monitoring dissolved oxygen levels of the wastewater.
28. The aerator of claim 27, wherein said controller maintains a selected dissolved  
20      oxygen level of the wastewater.
29. A method of aerating a fluid, comprising the steps of:  
providing a floating aerator having an uptake pipe;

pulling fluid into the uptake pipe;  
vertically displacing the fluid upwardly through the uptake pipe; and  
deflecting the flow of fluid in a selected direction upon discharge to form  
an aeration ditch.

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30. The method of claim 29, comprising the step of monitoring dissolved oxygen  
levels of the fluid.

31. The method of claim 30, comprising the step of controlling the volume of liquid  
10 being discharged to maintain a selected dissolved oxygen level based on the  
monitored levels.